

Organics Roadmap IV

**CalRecycle Public
Meeting**

May 17, 2011

Background

◆ Strategic Directive 6.1

- **Reduce the amount of organics in waste stream by 50% by 2020**

◆ Key Issues

- **Economic Incentives**
- **Siting & Capacity**
- **Regulatory and Permitting**
- **Research, Product Standards, and Technical Evaluations**
- **Education and Promotion**

Organics in the Waste Stream

- ◆ 32 million tons disposed in 2009
- ◆ Carbon-based organics: 21 million tons
- ◆ Compostable: 6.4 million tons
- ◆ Wood waste: 4.8 million tons
- ◆ Much material is difficult to recycle



Organics Diversion

- ◆ In 2008, about 9.3 million tons of organic materials processed by over 200 compost and chip & grind facilities
- ◆ Biomass Facilities
 - Consume about 5 million bone dry tons of biomass annually
- ◆ Need to divert an additional 10 million tons



The Future

- ◆ **Expansion of organics processing infrastructure**
- ◆ **Combination of traditional and emerging technologies**
- ◆ **Anaerobic digestion**



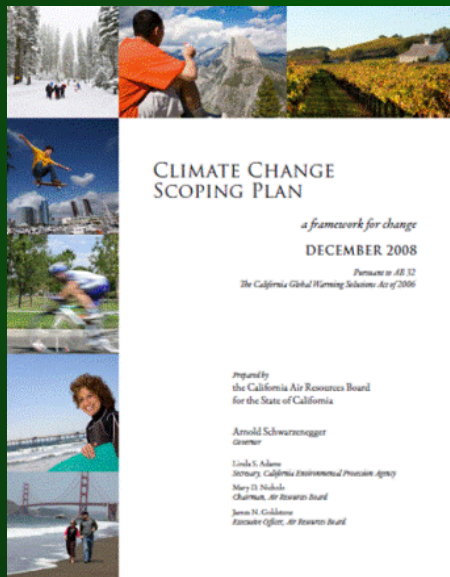
East Bay Municipal Utility District

Key Policy Drivers

◆ AB 32

◆ Low Carbon Fuel Standard

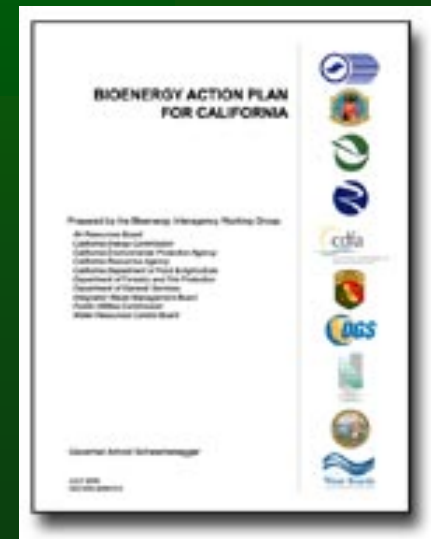
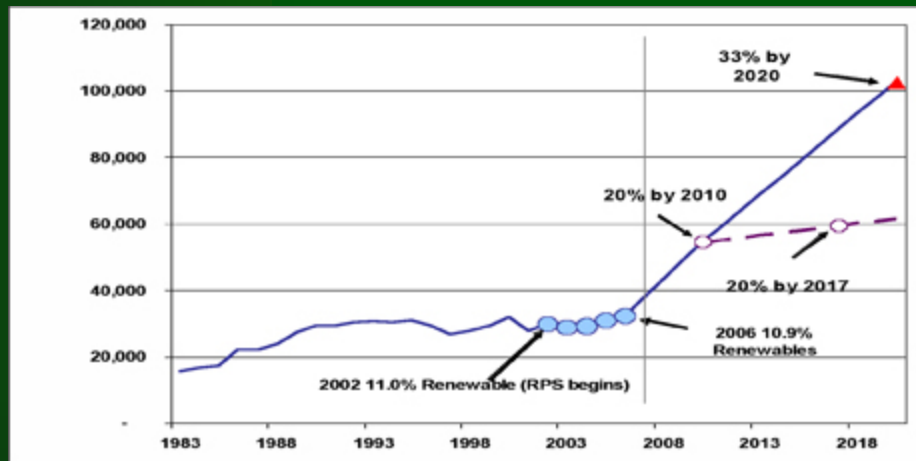
◆ AB 118



Source: CARB, Low Carbon Fuel Standard

Key Policy Drivers (cont.)

- ◆ Renewables Portfolio Standard
- ◆ Bioenergy Action Plan



Key Policy Drivers (cont.)

◆ Water Use Efficiency



Economic Incentives

- **AB 118 Alternative and Renewable Fuels**
- **CEC Bioenergy Action Plan**
- **RMDZ Loans**
- **GHG Emission Reduction Protocols**
- **www.calrecycle.ca.gov/business/incentives.htm**



Source: www.cleanmpg.com



Siting and Capacity

- Low Carbon Fuel Standard
- Threats to Compost Industry



Source: www.epcforepcs.co.uk



Light Brown Apple Moth



Pesticides



Sudden Oak Death

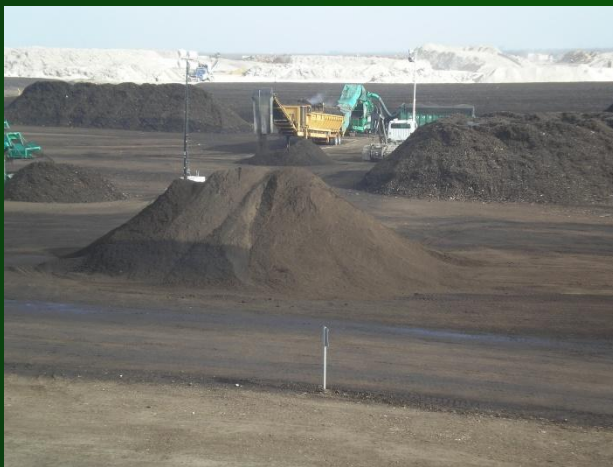
Regulatory and Permitting

- Air District Composting Rules
- Federal Clean Air Act New Source Review



Regulatory and Permitting (cont.)

- **SWRCB WDRs for composting facilities**
- **Anaerobic digestion program EIR**
- **S.D. 8.3 regulations reviews**
- **Mandatory commercial recycling regulations**



Source: Paso Robles Waste Disposal, Inc.

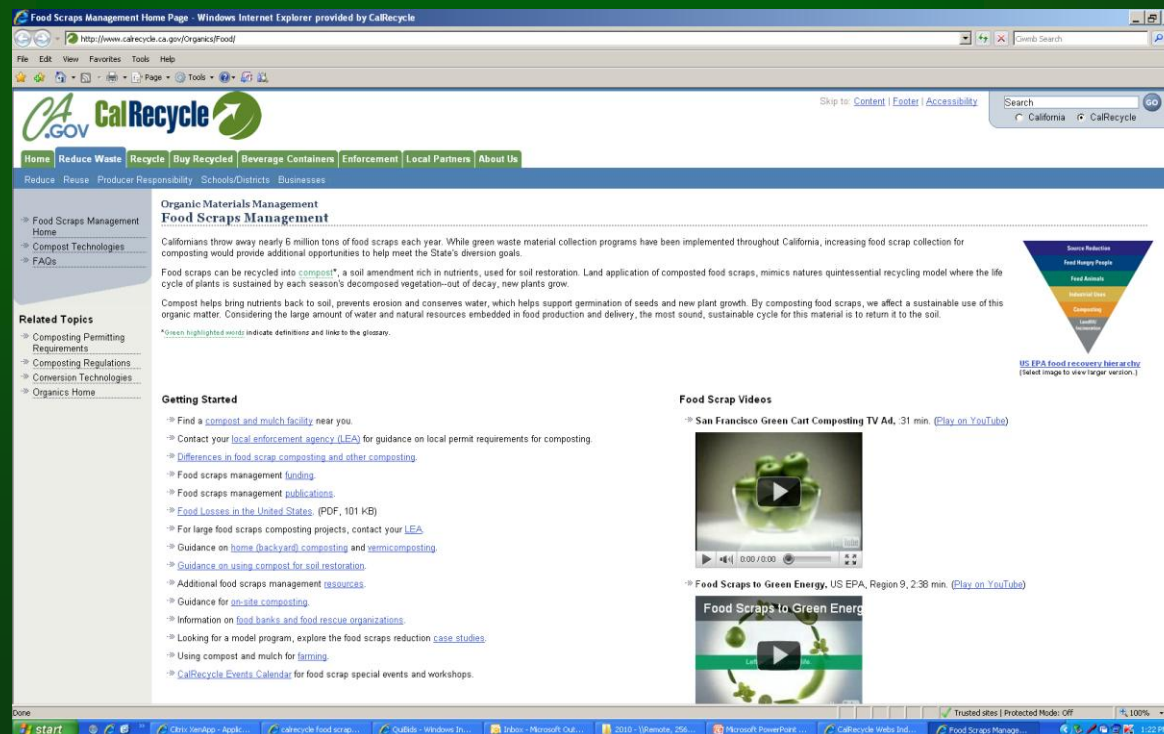
Research, Product Standards, and Technical Evaluations

- **Reactivity of green waste VOCs**
- **Compost BMPs & benefits contract**
- **LF-based anaerobic digestion pilot**
- **Compost cover at landfills methane reduction**
- **Compost production N₂O emissions**



Education and Promotion

- Annual LEA training
- Organics web enhancement



Thank You



www.CalRecycle.ca.gov